REVIEW ONLY - PGS RBR to L4 Traceablity

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0440#A	4178	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall accept from the DADS L0-L4 data products. Received information shall contain at a minimum: a. Product identification b. L0-L4 data set c. Metadata required for processing ~~d. Current date and time~~ ~~e. DADS identification~~	A: TRMM (CERES, ~~LIS~~) Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. Items c, d and e are not included in the current interface; PDPS provides product identification in the form of a UR to SDSRV to retreive products; any required metadata is included with the product.		S-DPS-20770	4407	A	interface	approved	demo	The PRONG CI shall accept ECS Data Products from the SDSRV CI.
												S-DPS-20780	4408	A	interface	approved	demo	The PRONG CI shall accept metadata from the SDSRV CI.
												S-DPS-60612	4706	A	interface	approved	demo	The SPRHW CI platforms shall have provision for interfacing with Data Server.
												S-DPS-60615	4707	A	interface	approved	demo	The SPRHW CI platforms shall have provision for interfacing with Ingest

REVIEW ONLY - PGS RBR to L4 Traceablity

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0450#A	4179	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall accept from the DADS ancillary data sets. Received information shall contain at a minimum: ~~a. Product identification~~ b. Ancillary data set c. Metadata required for processing ~~d. Current date and time~~ ~~e. DADS identification~~	CERES,~~LIS~~ processing Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. PDPS accesses data products from DSS by providing a UR that defines the product. Metadata is included in the product headers. No other information is required Items a, c, d, and e are not included in the current interface; any required metadata is included with the product.		S-DPS-20820	4412	A	interface	approved	demo	The PRONG CI shall accept Ancillary Data Products from the SDSRV CI.
PGS-0500#A	4185	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to generate Level 1 through 4 Standard Products using validated algorithms and calibration coefficients provided by the scientists.			S-PLS-00040	4223	A	functional	approved	demo	The PLANG CI shall reject a Production Request if an invalid product identifier has been specified.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-20440	4382	A	functional	approved	demo	The PRONG CI shall take a pre-determined error recovery action if the level of validation required for execution in the Data Processing Operational Environment has not been attained by the PGE version identified in the Data Processing Request .
												S-DPS-30700	5153	A	functional	approved	demo	The PRONG CI shall provide to the SDP Toolkit, at a minimum, the following metadata with the ephemeris data files for TRMM processing: a. Time range b. Orbit number range c. Platform
PGS-0500#A												S-DPS-20400	4378	A	functional	approved	demo	The PRONG CI shall accept a Data Processing Request (DPR) that requests the execution of a PGE.
PGS-0500#A												S-DPS-20410	4379	A	functional	approved	demo	The PRONG CI shall validate the information associated with the Data Processing Request.
PGS-0500#A												S-DPS-20490	4386	A	functional	approved	demo	The PRONG CI shall queue only validated Data Processing Requests

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0500#A												S-DPS-21000	4419	A	functional	approved	demo	The PRONG CI shall initiate execution of a PGE when the following is true: a. When all input data required to execute the PGE is available on local Data Processing subsystem storage resources b. When the computer hardware resources are available to support execution of a PGE based on the computer hardware resource information associated with the Data Processing Request. c. When the Priority Information associated with the Data Processing Request has been fulfilled. d. When the maximum disk space requirements defined for the PGE are available to support the successful execution of the PGE e. When the maximum memory resources defined for the PGE are available to support the successful

REVIEW ONLY - PGS RBR to L4 Traceablity

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0510#A	4186	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to generate metadata (see Appendix C) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.			S-DPS-21320	4434	A	functional	approved	demo	The PRONG CI shall use a SDP Toolkit API to associate Processing-Specific Metadata with each Granule of a generated Data Product.
												S-DPS-21330	4435	A	functional, interface	approved	demo	The PRONG CI shall provide Processing-Specific Metadata to the SDP Toolkit to be associated with each Granule of a generated Data Product.
												S-DPS-21460	4436	A	functional	approved	demo	The PRONG CI shall use a SDP Toolkit API to associate Q/A-Specific Metadata with each Granule of a Data Product
												S-DPS-21510	4439	A	functional	approved	demo	The PRONG CI shall support the capability to update Q/A metadata as required by the execution of a PGE performing automated Q/A.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0520#A	4188	mission essential	SDPS	functional	test	un-verified	test	unverifed	The PGS shall have the capability to generate data products from any single data input or combination of data inputs according to the algorithms provided by the scientists.	~~A: SDPF generated L0 data.~~ Release A product generation services/capabilities are based on needs made known (e.g., via design reviews) to ECS by the TRMM instruments teams. These do not include generation of data products with optional or alternate inputs; data products with staging for subsetting a subsampling data sets services; and processing control language constructs which enable repeatable patterns for the frequency in which algorithm's processing requests are accomplished.		S-PLS-00260	4239	A	interface	approved	demo	For each Production Request being processed, the PLANG CI shall interact with the appropriate instance of the SDSRV CI to determine whether the Granules neede to satisfy the request exist.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0560#A	4189	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall maintain copies of generated products to be used as inputs to other scheduled products for processing efficiency.	A: CERES, ~~LIS~~		S-PLS-00710	4262	A	functional	approved	demo	The PLANG CI shall create a Candidate Plan based on the following: 1. Outstanding production requests, their priorities and estimated runtimes, 2. Ground events their priority and estimated duration, 3. Planning production rules, 4. Mutual PGE accessibility of shared data, 5. Completion notification status messages from Data Processing.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-21000	4419	A	functional	approved	demo	The PRONG CI shall initiate execution of a PGE when the following is true: a. When all input data required to execute the PGE is available on local Data Processing subsystem storage resources b. When the computer hardware resources are available to support execution of a PGE based on the computer hardware resource information associated with the Data Processing Request. c. When the Priority Information associated with the Data Processing Request has been fulfilled. d. When the maximum disk space requirements defined for the PGE are available to support the successful execution of the PGE e. When the maximum memory resources defined for the PGE are available to support the successful

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-21520	4440	A	interface	approved	demo	The PRONG CI shall coordinate the deletion of the outputs of a PGE which were temporarily store in the SDSRV CI.
												S-DPS-21540	4442	A	interface	approved	demo	The PRONG CI shall destage all output data generated by a PGE to the SDSRV CI. ~~(SEE Data Staging and Destaging Reqs for more details).~~
PGS-0590#A	4190	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to indicate the temporary status of data stored in the DADS that is awaiting QA or human interaction in product production.	A: CERES, ~~LIS~~ Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. Data is not stored temporarily in the DSS to await QA before being committed to storage. All data products that are produced are stored. In Rel B, subsequent processing may be delayed for some period waiting for QA before continuing with processing. No need identified in Rel. A for “man-in-the-loop” QA.		~~S-DPS-22120~~	4490	A	functional	approved	demo	The PRONG CI shall support a capability to alert the operations sta of a Data Product which is being stored temporaril in the Data Serve

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												~~S-DPS-22130~~	4491	A	functional	approved	demo	The PRONG CI shall support a capability to alert the operations sta of a Data Product which requires quality assurance activities.
PGS-0590#A												S-DPS-20830	4941	A	interface	approved	demo	The PRONG CI shall send a Data Insert Request message to the SDSRV CI to initiate the destaging of data.
PGS-0590#A												S-DPS-20860	4416	A	interface	approved	demo	The PRONG CI shall destage ECS Data Products to the SDSRV CI.
PGS-0595#A ***Note: children for this requirement are created in ECS CCR 96-0754-*** ***No change for this requirement***	6146		SDPS	functional					The PGS shall provide, to the ASTER science software, access to a relational database management system.	No operational capabilities; only acceptance and integration & test	ASTER for EOS flight AM-1 thus no operational capabilities in A							

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0600#A	4191	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall provide an algorithm and calibration test and validation environment that is fully compatible with but isolated from the operational production environment.	A: CERES, ~~LIS~~ This requirement supports conduct of science software I&T without impact to operations. "Isolation" from the production environment may be achieved through resource allocation rather than resource duplication. Mode Management will support this capability at Rel. A.1.		S-DPS-42330	4641	A	functional	approved	demo	The AITTL CI shall provide the capability for the operations staff ~~shall have the capability~~ to run binary executable without impacting other ongoing DAAC activities.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0600#A												S-DPS-60230	4684	A	performance	approved	demo	The SPRHW CI shall provide a phased capacity t support: a. for pre-launch AI&T at launch minus 2 years: 0.3 X, where X is define as the at-launch processing estimate b. for pre-launch AI&T and System I&T at-launch minus 1 year: 1.2 X, where X is define as the at-launch processing estimate c. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 1 year: 2.2 X where X is define as the standard processing estimate for that period d. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 2 years: 4.2 X, where X is defined as the standard processing estimate for that period.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0600#A												S-DPS-60500	4699	A	RMA	approved	demo	The SPRHW CI shall be capable o supporting scienc software test without impact to normal operations
PGS-0600#A												S-PLS-00740	10109	A	functional	approved	demo	The PLANG CI shall have the capability to schedule algorithm test Data Processing Requests that do not interfere with the operational production environment.
PGS-0605#A	4193	mission essential	SDPS	functional	test	unverified	test	unverified	The PGS shall process pre-launch test data and provide test data product samples for user verification.	A: CERES, ~~LIS~~ The science software I&T process defined for ECS (supported by AITTL CI tools) will allow for testing & integration of instrument team (IT) provided science software with IT provided test data sets.		S-DPS-42630	4660	A	functional	approved	demo	The AITTL CI shall provide the capability for the operations staff ~~shall have the capability of~~ to run PGEs in a parallel test or for a commissioning period, utilizing th Planning and Processing Subsystems and the Product outpu flagged as "test".
PGS-0605#A												S-DPS-20830	4941	A	interface	approved	demo	The PRONG CI shall send a Data Insert Request message to the SDSRV CI to initiate the destaging of data.
PGS-0605#A												S-DPS-20860	4416	A	interface	approved	demo	The PRONG CI shall destage ECS Data Products to the SDSRV CI.

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PGS-0610#A	4194	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall accept from the SCFs new or modified calibration coefficients to be validated in the test environment. Calibration coefficients shall contain the following information at a minimum: a. Identification of coefficient data set b. Calibration coefficients values c. Author and version number d. Identification of related processing algorithm e. Start and stop date/time of applicability f. Date and time g. SCF identification h. Reasons for update	Interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. Concepts for SSI&T and associated interfaces are described in "Software Developer's Guide to Preparation, Delivery, Integration and Test with ECS" Document No. 205-CD-002-002.		S-DPS-40010	4546	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
												S-DPS-40020	4547	A	interface	approved	demo	The AITTL CI shall have the capability to receive a Science Software Delivery from the Science Data Server.
												S-DPS-40030	4548	A	functional	approved	demo	The AITTL CI shall provide the operations staff with the capability to register a Subscription with the Data Server to be notified when a new Science Software Delivery is received.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-40040	4549	A	functional	approved	demo	The AITTL CI shall provide the operations staff with the capability to request transfe of the Science Software Delivery files from the Data Server to the local I&T area.
												S-DPS-42200	4634	IR1	procedural	agreed	test/demo	Whenever a Science Software Delivery is received by the AITTL CI directly from the SCF via the network, the operations staff shall notify the SCF that the delivery has been received successfully.
~~PGS-0620#A~~	4195	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to validate received calibration coefficients for completeness and correct format.	Updated calibration files are validated through the science software I&T process, i.e., by running the science software and confirming that the results are consistent with SCF produced results. No specific file completeness and format correctness checks are done.		~~S-DPS-40700~~	4564	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to display data in hexadecimal, octal, decimal, or ASCII form.

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~~PGS-0620#A~~												~~S-DPS-40710~~	4565	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to display data as a two- or three-dimensional image.
~~PGS-0620#A~~												~~S-DPS-40720~~	4566	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to display data as a two- or three-dimensional plot.
~~PGS-0620#A~~												~~S-DPS-40730~~	4567	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to difference data an to display the differences as a two- or three-dimensional image or plot.
~~PGS-0620#A~~												~~S-DPS-40740~~	4568	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to produce and play "movie loop" of data in two- or three-dimensiona image or plot form.

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~~PGS-0620#A~~												~~S-DPS-40750~~	4569	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to display an arbitrary two-dimensional slice of a three-dimensional image or plot.
~~PGS-0620#A~~												~~S-DPS-40760~~	4570	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to rotate a three-dimensional image or plot about an arbitrary axis.
~~PGS-0620#A~~												~~S-DPS-40770~~	4571	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include providing the user with the option to specify the color table for new or existing image displays.
~~PGS-0620#A~~												~~S-DPS-40780~~	4572	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include providing the user with the option to specify the axis limits for new or existing plot displays.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
~~PGS-0620#A~~												~~S-DPS-40790~~	4573	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include providing the operations sta with the option to specify the parameter assigned to each axis in new or existing plot or image displays.
~~PGS-0620#A~~												~~S-DPS-40800~~	4574	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to display simultaneously multiple views of the same or different data in different windows
~~PGS-0620#A~~												~~S-DPS-40810~~	4575	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to save any plot, image, c hex/decimal/octal ASCII dump to a file.
~~PGS-0620#A~~												~~S-DPS-40820~~	4576	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include feature enhancement capabilities, including but not limited to (1) histogram equalization and (2) edge enhancement.

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~~PGS-0620#A~~												~~S-DPS-40830~~	4577	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to read ASCII, binary, or HDF files.
~~PGS-0620#A~~												~~S-DPS-40840~~	4578	A	functional	approved	demo	The data visualization capability of the AITTL CI shall include the capability to allow the operations staff to specify a custom input data format.
~~PGS-0620#A~~												~~S-DPS-40900~~	4579	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified absolute threshold.
~~PGS-0620#A~~												~~S-DPS-40910~~	4580	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified relative threshold.
~~PGS-0620#A~~												~~S-DPS-40920~~	4581	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to generate report files describing the results of file comparisons.

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												S-DPS-40930	4582	IR1	functional	agreed	test/demo	The file comparison capability of the AITTL CI shall include the capability to read ASCII, binary, or HDF files.
												S-DPS-40940	4583	IR1	functional	agreed	test/demo	The file comparison capability of the AITTL CI shall include the capability to allow the operations sta to specify a custom data format.
~~PGS-0620#A~~												~~S-DPS-42150~~	4628	IR1	functional	agreed	inspection	The operations staff shall have th capability to examine all test data and expectec test results files included in the Delivery Package to verify completeness and correct format.
~~PGS-0620#A~~												~~S-DPS-42160~~	4629	IR1	functional	agreed	inspection	The operations staff shall have th capability to examine all coefficient files included in the Delivery Package to verify completeness and correct format.

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PGS-0620#A												S-DPS-42630	4660	A	functional	approved	demo	The AITTL CI shall provide the capability for the operations staff ~~shall have the capability of~~ to run PGEs in a parallel test or for a commissioning period, utilizing th Planning and Processing Subsystems and the Product outpu flagged as "test".
PGS-0630#A	4196	mission essential	SDPS	functional	test	unverified	test	unverified	The PGS shall send the DADS new or modified calibration coefficients which shall contain the following information at a minimum: a. Identification of coefficient data set b. Calibration coefficients values ~~c. Author and version number~~ d. Identification of related processing algorithm ~~e. Start and stop date/time of applicability~~ ~~f. Documentation~~	Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. PDPS accesses data products from DSS by providing a UR that defines the product. Metadata is included in the product headers. No other information is required Items c, e, and f are not included in the current interface; current interface is defined by DID 311.		S-DPS-60612	4706	A	interface	approved	demo	The SPRHW CI platforms shall have provision for interfacing with Data Server.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0630#A												S-DPS-41920	9252	A	functional			The AITTL CI shall provide to th operations staff th capability to store a Science Software Archive Package to the Data Server.
~~PGS-0640#A~~	4197	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall accept from the SCF new or modified Standard Product algorithms to be tested at the processing facility. This software shall be received into the test environment and shall contain the following information at a minimum : a. Algorithm identification b. Algorithm source code c. List of required inputs d. Processing dependencies e. Test data and procedures f. Algorithm documentation	~~A: Adding the interface with the Dataserver, ESN and LaRC DAAC interface~~. Science software may include these items and much more, or be only one of the items in an update package. Concepts for SSI&T and associated interfaces are described in "Software Developer's Guide to Preparation, Delivery, Integration and Test with ECS" Document No. 205-CD-002-002. The test environment is the AITTL CI environment.		~~S-INS-00670~~	4134	A	interface	approved	demo	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the MSFC DAAC using a file transfer protocol.

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												S-INS-00680	4135	A	interface	approved	demo	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the LaRC DAAC using a file transfer protocol.
												S-DPS-40010	4546	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
												S-DPS-40020	4547	A	interface	approved	demo	The AITTL CI shall have the capability to receive a Science Software Delivery from the Science Data Server.
												S-DPS-40030	4548	A	functional	approved	demo	The AITTL CI shall provide the operations staff with the capability to register a Subscription with the Data Server to be notified when a new Science Software Delivery is received.
												S-DPS-40040	4549	A	functional	approved	demo	The AITTL CI shall provide the operations staff with the capability to request transfe of the Science Software Delivery files from the Data Server to the loca I&T area.

REVIEW ONLY - PGS RBR to L4 Traceablity

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42200	4634	IR 1	procedural	agreed	test/demo	Whenever a Science Software Delivery is received by the AITTL CI directly from the SCF via the network, the operations staff shall notify the SCF that the delivery has been received successfully.
~~PGS-0900#A~~	4201	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall send test products to the SCF for analysis. These shall contain the results of algorithm testing and shall contain the following information at a minimum: a. Algorithm identification b. Test time(s) c. Processor identification d. Test results	Interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture.		~~C-CSS-60500~~	2396	IR 1	functional	approved		The CSS File Access Service shall provide functionality for interactive and non-interactive transfer of files (send and receive between two host systems.
												S-DSS-00680	3301	A	interface	approved	demo	The SDSRV CI shall be capable o receiving data from the AITTL C
												S-DSS-03440	3470	A	interface	approved	demo	The SDSRV CI shall interface wit the STMGT CI to provide storage fo Science Software Archive Package
												S-DSS-30520	3866	A	functional	approved	demo	The DDIST CI shall provide the capability to place Data in publicly available disks fo users to "pull" the data, via ftp, at their discretion.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42640	4661	IR1	functional	agreed	test/demo	The operations staff shall have the capability to send the test results to the SCF for analysis.
~~PGS-0900#A~~												~~C-CSS-60510~~	4813	IR1	functional	approved		The CSS File Access Service shall be capable o transferring ASCI and binary files.
~~PGS-0900#A~~												~~C-CSS-60610~~	4823	IR1	functional	approved		The CSS File Access Service shall allow selection of the file type (ASCII or binary).

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
~~PGS-0900#A~~												~~C-MSS-40000~~	4896	A	functional	approved		The MSS configuration management application servic at each site shall track the following items at the site b name and identifier: a. ECS subsystems, networks, and configured syster and network devices such as workstations, servers, and routers b. ECS releases and site baselines c. ECS hardware and software resources designated as configuration items d. specifi ations asscoiated with configuration items e. technic al documentation and test materials f. scienti c algorithms, including software data and test materials (DAAC only)
~~PGS-0900#A~~												~~C-CSS-60600~~	9337	IR 1	functional	approved		The CSS File Access Service shall provide connection oriented operatior for file transfers.

REVIEW ONLY - PGS RBR to L4 Traceablity

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
~~PGS-0900#A~~												~~C-CSS-60620~~	9338	IR1	functional	approved		The CSS File Access Service shall support proxy mode of operation which enables transfer o files between two remote hosts.
~~PGS-0900#A~~												~~C-CSS-60630~~	9339	IR1	functional	approved		The CSS File Access Service shall provide capability to list remote files
~~PGS-0900#A~~												~~C-CSS-60640~~	9340	IR1	functional	approved		The CSS File Access Service shall support wildcards in files on the remote host.
~~PGS-0900#A~~												~~C-CSS-60650~~	9341	IR1	functional	approved		The CSS File Access service shall support anonymous FTP which allows read access to all users.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0920#A	4203	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products.			S-PLS-61210	4350	A	standards	approved	demo	The operating system for each Unix platform in the PLNHW CI shall conform to the POSIX.2 standard.
												S-PLS-61220	4351	A	functional	approved	demo	Each PLNHW CI POSIX.2 compliant platforr shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof nm.
												S-PLS-61230	4352	A	functional	approved	demo	Each PLNHW CI POSIX.2 compliant platforr shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-PLS-61240	4353	A	functional	approved	demo	Each PLNHW CI platform shall have the following POSIX.2 Software Development utilities installed: make, imake.
												S-PLS-61260	4354	A	functional	approved	demo	Each PLNHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
												S-DPS-40200	4552	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to verify that Science Software source code written in C complies with the ANSI standard specification for C
												S-DPS-40210	4553	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to verify that Science Software source code written in FORTRAN77 complies with the ANSI standard specification for FORTRAN77.
												S-DPS-40230	4554	IR 1	functional	agreed	test/demo	The AITTL CI shall have the capability to verify that Science Software source code written in FORTRAN 90 complies with the ANSI standard specification for FORTRAN 90.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-40250	4555	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to verify that Science Software source code written in Ada complies with the military specification MIL-STD-1815-A.
												S-DPS-40400	4561	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to determine if the Science Software contains memory leaks.
												S-DPS-40405	4562	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to determine if the Science Software contains out of bounds indexing.
												S-DPS-40430	4563	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to generate report files describing th results of code analysis.
												S-DPS-40900	4579	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified absolute threshold.
												S-DPS-40910	4580	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to find all differences between two data files which are greater than some specified relative threshold.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-40920	4581	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to generate report files describing th results of file comparisons.
												S-DPS-40930	4582	IR1	functional	agreed	test/demo	The file comparison capability of the AITTL CI shall include the capability to read ASCII, binary, or HDF files.
												S-DPS-40940	4583	IR1	functional	agreed	test/demo	The file comparison capability of the AITTL CI shall include the capability to allow the operations sta to specify a custom data format.
												S-DPS-41000	4584	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the CPU time of a process
												S-DPS-41005	4585	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the wall clock time of a process.
												S-DPS-41010	4586	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the CPU time of each procedure within process.
												S-DPS-41015	4587	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the wall clock time of eacl procedure within process.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-41020	4588	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the memory usage of a process.
												S-DPS-41030	4589	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to measure the disk space usage of a process.
												S-DPS-41035	4590	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to count the number of page faults for a process.
												S-DPS-41040	4591	IR1	functional	agreed	test/demo	The AITTL CI shall have the capability to count the number of I/O accesses made b a process to each of its input and output data files.
												S-DPS-41895	4618	IR1	functional	agreed	test/demo	The AITTL CI shall provide to th operations staff th capability to retrieve a specified data file from local DAAC storage.
												S-DPS-41900	4619	A	functional	approved	demo	The AITTL CI shall provide to th operations staff, via a GUI, the capability to retrieve a specified data file from a specified Data Server.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42000	4620	IR 1	functional	agreed	test	The AITTL CI shall provide the operations staff with the capability to view the metadata associated with a data file.
												S-DPS-42005	4621	IR 1	functional	agreed	test	The AITTL CI shall provide the operations staff with the capability to edit the metadata associated with a data file.
												S-DPS-42010	4622	IR 1	functional	agreed	test	The AITTL CI shall provide the operations staff with the capability to write the metadata associated with a data file to a repo file.
												S-DPS-42310	4637	IR 1	procedural	agreed	test/demo	The operations staff shall link FORTRAN77, FORTRAN 90 an C object code wit the DAAC versio of the SDP Toolki
												S-DPS-42315	4638	IR 1	procedural	agreed	test/demo	The operations staff shall link Ada object code for CERES with the DAAC version of the SDP Toolkit.
												S-DPS-42320	4639	IR 1	functional	agreed	test/demo	The operations staff shall have th capability to link FORTRAN77, FORTRAN 90 an C object code wit other libraries.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42325	4640	IR1	functional	agreed	test/demo	The operations staff shall have the capability to link Ada object code for CERES with other libraries.
												S-DPS-42340	4642	A	functional	approved	demo	The AITTL CI shall provide the capability for the operations staff ~~shall have the capability~~ to perform dynamic analyses of source code for (at a minimum) memory leaks, out of bounds indexing, and distribution of resource demands.
												S-DPS-42350	4643	IR1	functional	agreed	test/demo	The operations staff shall have the capability to execute perl, C shell or Bourne shell scripts.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42360	4644	IR1	functional	agreed	test/demo	The operations staff shall have the capability of determining the computing resources utilized by an execution of a PGE; viz., PGE CPU time, system CPU time, elapsed time, percent elapsed time, shared memory use, maximum memory used, number of page faults, number of swaps, number of block input operations, and number of block output operations.
												S-DPS-42500	4647	IR1	procedural	agreed	test/demo	The operations staff shall execute the Test Plans included in the Delivery Package
												S-DPS-42560	4653	IR1	functional	agreed	test	The operations staff shall have the capability of viewing the Status Information files associated with the generated Data Product.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-42630	4660	A	functional	approved	demo	The AITTL CI shall provide the capability for the operations staff ~~shall have the capability of~~ to ru PGEs in a paralle test or for a commissioning period, utilizing th Planning and Processing Subsystems and the Product outpu flagged as "test".
												S-DPS-61120	4726	IR 1	functional	agreed	demo/inspection	The SPRHW CI POSIX.2 compliant platforr shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof nm.
												S-DPS-61130	4727	IR 1	functional	agreed	inspection	The SPRHW CI POSIX.2 compliant platforr shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
												S-DPS-61140	4728	IR 1	functional	agreed	inspection	The SPRHW CI POSIX.2 compliant platforr shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-61150	4729	IR1	functional	agreed	inspection	The SPRHW CI POSIX.2 compliant platforr shall have the following POSIX.2 C-Language Development Utilities installeda a minimum: lex, yacc.
												S-DPS-61160	4730	IR1	functional	agreed	inspection	The SPRHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shel Bourne shell, Kor shell.
												S-DPS-61170	4731	IR1	functional	agreed	inspection	The SPRHW CI POSIX.2 compliant platforr shall have on-line documentation or printed documentation fo each installed too
												S-DPS-70183	4750	IR1	functional	agreed	inspection	The AITHW CI POSIX.2 compliant platforr shall have on-line documentation or printed documentation fo each installed too
												S-DPS-80155	4774	A	functional	approved	demo	The AQAHW CI POSIX.2 compliant platforr shall have on-line documentation or printed documentation fo each installed too

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-70130	4839	IR 1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
												S-DPS-70120	4840	IR 1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof nm.
												S-DPS-70110	4841	IR 1	standards	agreed	test/analysis	The operating system for each UNIX platform in the AITHW CI shall conform to the POSIX.2 standard.
												S-DPS-70140	4847	IR 1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
												S-DPS-70150	4848	IR 1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex yacc.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-70160	4849	IR1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shel Bourne shell, Kor shell.
												S-DPS-70180	4850	IR1	functional	agreed	test/analysis	The AITHW CI shall have provision for a dynamic analyze to support the capability to chec Science Software source code for memory leaks.
												S-DPS-70190	4851	IR1	functional	agreed	test/analysis	The AITHW CI POSIX.2 compliant platfor shall have installed one or more developme environment supporting the following languages: a. C b. C++ c. FORTRAN 77 d. FORTRAN 90
												S-DPS-40295	4893	IR1	functional	agreed	test/demo	The AITTL CI shall provide standards checking capabilities, including, but not limited to: a. Flagging whenever a bit operation is used on signed numbers. (C only b. Flagging argument list mismatches (type and number of arguments).

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-61110	9141	IR1	standards	agreed	test/analysis	The operating system for each Unix platform in the SPRHW CI shall conform to the POSIX.2 standard.
PGS-0930#A	4205	mission essential	SDPS	functional	test	un-verified	test		The PGS shall have the capability to transfer validated algorithm software and calibration coefficients from the test environment to the operational environment to be used in the production of Standard Products.	A: TRMM ~~Transfer of algorithm implies verifying proper resource utilization resources~~.		S-DPS-42625	NEW	A	functional	approved	demo	The AITTL CI shall provide the capability for operations staff to transfer PGE profile information needed for production planning, from the AITTL CI integration and test environment PDPS database to the operational PDPS database following completion of the science software integration and test process.
~~PGS-0930#A~~												~~S-DPS-41300~~	4604	A	functional	approved	demo	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a list of PGE Database Entries.
~~PGS-0930#A~~												~~S-DPS-41310~~	4605	A	functional	approved	demo	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a specific PGE Database Entry.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
~~PGS-0930#A~~												~~S-DPS-41320~~	4606	A	functional	approved	demo	The AITTL CI shall provide to th operations staff, via a GUI, the capability to modify a specific PGE Database Entry.
~~PGS-0930#A~~												~~S-DPS-41330~~	4607	A	functional	approved	demo	The AITTL CI shall provide to th operations staff, via a GUI, the capability to add a new PGE Database Entry.
~~PGS-0930#A~~												~~S-DPS-41340~~	4608	A	functional	approved	demo	The AITTL CI shall provide to th operations staff, via a GUI, the capability to remove a specific PGE Database Entry.
~~PGS-0930#A~~												~~S-DPS-41350~~	4609	A	functional	approved	demo	The AITTL CI shall provide to th operations staff, via a GUI, cut, copy, and paste capability for a PGE Database Entry.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0940#A	4216	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall provide storage for all candidate algorithms' software executables and calibration coefficients.	The science processing systems including storage used for ordinary science processing will also be used for science software I&T. These resources will be allocated from the science processor pool for this purpose.		S-DPS-60050	4675	IR1	functional	agreed	test/demo	The SPRHW CI shall contain and/or provide access to staging (working storage) I/O and processin resources necessary to perform routine processing.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0940#A												S-DPS-60230	4684	A	performance	approved	demo	The SPRHW CI shall provide a phased capacity t support: a. for pre-launch AI&T at launch minus 2 years: 0.3 X, where X is define as the at-launch processing estimate b. for pre-launch AI&T and System I&T at-launch minus 1 year: 1.2 X, where X is define as the at-launch processing estimate c. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 1 year: 2.2 X where X is define as the standard processing estimate for that period d. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 2 years: 4.2 X, where X is defined as the standard processing estimate for that period.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-0940#A												S-DPS-60500	4699	A	RMA	approved	demo	The SPRHW CI shall be capable o supporting scienc software test without impact to normal operations
PGS-0950#A	4217	mission essential	SDPS	functional	test	un-verified	test		The PGS shall interface to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data, and results c. Date and time of operational installation d. Compiler identification and version e. Final algorithm documentation			C-MSS-40000	4896	A	functional	approved	demo	The MSS configuration management application servic at each site shall track the following items at the site b name and identifier: a. ECS subsystems, networks, and configured syster and network devices such as workstations, servers, and routers b. ECS releases and site baselines c. ECS hardware and software resources designated as configuration items d. specifi ations asscoiated with configuration items e. technic al documentation and test materials f. scienti c algorithms, including software data and test materials (DAAC only)

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DPS-41400	9138	IR1	interface	agreed	test/demo	The AITTL CI shall include access to a configuration management tool supplied by MSS.
PGS-0960#A	4220	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall send the DADS new or modified algorithms. This delivery shall contain the following information at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data and results c. Date and time of operational installation d. Final algorithm documentation e. Calibration coefficient values	A: CERES, LIS Science software to be inserted to the SDSRV may include these items and much more, or be only one of the items in an update package. Interfaces do not include Date and Time of operational installation. Concepts for SSI&T and associated interfaces are described in "Software Developer's Guide to Preparation, Delivery, Integration and Test with ECS" Document No. 205-CD-002-002.	.	S-DPS-41920	9252	A	functional	approved	demo	The AITTL CI shall provide to th operations staff th capability to store a Science Software Archive Package to the Data Server.
												S-DPS-41910	9253	A	functional	approved	demo	The AITTL CI shall provide to th operations staff th capability to retrieve a copy of a specific Science Software Archive Package.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1010#A ***CCR 96-0303 provides L4 children***	4227	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall provide mass storage allocation subroutines that provide algorithms with a means for dynamic allocation of storage for temporary files.									
PGS-1020#A ***CCR 96-0303 provides L4 children***	4230	mission essential	SDPS	functional	test	un-verified	test inspection	un-verified	The PGS shall provide mathematical libraries including: a. Linear algebra and analysis (e.g., LINPAC, IMSL) b. Statistical calculations (e.g., SAS, SPSS)									
PGS-1030#A ***CCR 96-0303 provides L4 children***	4234	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall provide a toolkit to the SCF containing versions of the routines specified in requirements PGS-0970 to PGS-1020.									

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1130#A	4252	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall receive product QA from the SCF which shall describe the results of the scientists product quality review at an SCF. Product QA shall contain the following information at a minimum: a. Identification of product b. QA results ~~c. Product storage and processing instructions~~	A: CERES, ~~LIS~~ Metadata = Product ID, QA results, ~~Product Storage and Processing Instructions~~. Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. PDPS accesses data products from DSS by providing a UR that defines the product. Metadata is included in the product headers. No other information is required Item c is not included in the current interface; current interface is defined by DID 311. SCF QA is intended to describe scientific quality of data.		S-DSS-04590	3541	A	functional	approved	demo	The SDSRV CI shall provide services to modif the existing Inventory
												S-CLS-01640	9832	A	interface			The DESKT CI shall provide QA metedata updates to the SDSRV CI.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
												S-DSS-04595	9834	A	interface			The SDSRV CI shall be capable o receiving QA metadata updates from the DESKT CI.
												S-DSS-04596	9835	A	functional			The SDSRV shal provide the capability to allow DAAC operations personnel to approve the QA metadata update.
												S-CLS-01630	9837	A	functional			The DESKT CI shall provide a GUI to allow SCFs to request a QA metadata update with updat data.
PGS-1140#A	4253	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to provide the data product quality staff with the Product QA data from the SCF.	A: CERES, ~~LIS~~ The QA Metadata Update interface will allow SCF staff to peruse and modify the Science Quality Flag. The Automatic and Operational Quality Flags will also be displayed along with expanitory text.		S-DPS-22110	4489	A	functional	approved	demo	The PRONG CI shall provide an interface to support the visual display of all metadata associated with the generation of a Data Product.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1150#A	4255	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to accept the identification of products that are not to be stored in the DADS due to inferior quality or other reasons. The reason for all such actions shall also be specified.	Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. All data successfully produced by a PGS will be stored to SDSRV.		S-DPS-21510	4439	A	functional	approved	demo	The PRONG CI shall support the capability to update Q/A metadata as required by the execution of a PGE performing automated Q/A.
												S-DPS-21520	4440	A	interface	approved	demo	The PRONG CI shall coordinate the deletion of the outputs of a PGE which were temporarily store in the SDSRV CI.
												S-DPS-22120	4490	A	functional	approved	demo	The PRONG CI shall support a capability to alert the operations sta of a Data Product which is being stored temporaril in the Data Serve
												S-DPS-22130	4491	A	functional	approved	demo	The PRONG CI shall support a capability to alert the operations sta of a Data Product which requires quality assurance activities.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1190#A	4262	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to log the identification of all non-stored products or suspended processing directed by the data product quality staff to support the maintenance of performance statistics.	Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. All data successfully produced by a PGS will be stored to SDSRV. No need identified in RelA for "man-in-loop" QA. Processing using a particular PGE may be halted by removing these jobs from the plan. Normal production reports will provide the required identification.		S-DPS-20850	4415	A	interface	approved	demo	The PRONG CI shall destage Intermediate Data Products to the SDSRV CI.
												S-DPS-21540	4442	A	interface	approved	demo	The PRONG CI shall destage all output data generated by a PGE to the SDSRV CI. (SEE Data Staging and Destaging Reqs for more details).

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1200#A	4263	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the products input data sets.	Reporting concept is to provide key data in the databases and let M&O define and develop needed reports using COTS report writing tools. All products can have quality indicator metadata. All standard products also contain references to products used in their generation.		S-DPS-21460	4436	A	functional	approved	demo	The PRONG CI shall use a SDP Toolkit API to associate Q/A-Specific Metadata with each Granule of a Data Product
												S-DPS-21490	4437	A	functional	approved	demo	The PRONG CI shall record the Q/A-Specific Metadata of each input Data Product as part of the Q/A Specific Metadata of the Granule of a Data Product.
												S-DPS-21510	4439	A	functional	approved	demo	The PRONG CI shall support the capability to update Q/A metadata as required by the execution of a PGE performing automated Q/A.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1240#A	4269	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall send the generated Level 1 to Level 4 Standard Products to the DADS. These products shall contain the following information at a minimum: a. Product identification b. L1-L4 data set ~~c. Product processing priority~~ ~~d. Current date and time~~ e. Associated metadata	A: TRMM Internal interfaces defined by Level 3s are not necessarily consistent with the current ECS architecture. PDPS accesses data products from DSS by providing a UR that defines the product. Metadata is included in the product headers. No other information is required Items c and d are not included in the current interface; the current interface is defined by DID 311.		S-DPS-20860	4416	A	interface	approved	demo	The PRONG CI shall destage ECS Data Products to the SDSRV CI.
												S-DPS-60612	4706	A	interface	approved	demo	The SPRHW CI platforms shall have provision for interfacing with Data Server.
PGS-1250#A	4271	mission essential	SDPS	functional	test	un-verified	test	un-verified	The PGS shall send the DADS the calibrated ancillary data.	~~AM-1, Color~~ Calibrated ancillary data products are like any data product and can be stored to the Data Server		S-DPS-20860	4416	A	interface	approved	demo	The PRONG CI shall destage ECS Data Products to the SDSRV CI.

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RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clar._text	L4 id	req_key	rel	req_type	req_status	verification_method	text
PGS-1300#A	6194	mission essential	SDPS	performance	analysis	un-verified	analysis	un-verified	Each PGS shall provide a processing capacity four times the size necessary to process all EOS science data for which it is responsible, except for the Data Assimilation Office requirements shown in Appendix C, Table C-5a. It shall be possible to effectively utilize the entire reprocessing capacity at each site on computers with similar architectural design (e.g., parallel processors), for a single algorithm or any mix of algorithms normally run at that site. The four times processing capacity accounts for: a. 1 times to allow for normal processing demands b. 2 times to allow for reprocessing demands c. 1 times to allow for algorithm integration and test demands, production of prototype products, ad hoc processing for "dynamic browse" or new search and access techniques developed by science users, and additional loads due to spacecraft overlap.	~~RQMT will be phased so that processing capacity will be provided following 2 years after MSN launch.~~ Release A Processing capacity provided is equal to 1.2X normal processing for CERES on TRMM and .3X normal processing for AM-1 instruments. This will be provided only at the GSFC, LaRC and EDC DAACs. Totals provided as derived from the August, 1995 Technical Baseline (Release A procurement baseline) in MFLOPS is @ LaRC: 7125; @ GSFC: 3467, and @ EDC: 1086. These capacities include the 25% efficiency required by PGS-1301#A		S-DPS-60230	4684	A	performance	approved	demo	The SPRHW CI shall provide a phased capacity t support: a. for pre-launch AI&T at launch minus 2 years: 0.3 X, where X is define as the at-launch processing estimate b. for pre-launch AI&T and System I&T at-launch minus 1 year: 1.2 X, where X is define as the at-launch processing estimate c. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 1 year: 2.2 X where X is define as the standard processing estimate for that period d. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 2 years: 4.2 X, where X is defined as the standard processing estimate for that period.

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												S-DPS-60240	9208	A	performance	approved	demo	The SPRHW CI shall support a total processing requirement as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
PGS-1301#A	4292	mission essential	SDPS	performance	analysis	un-verified	analysis	un-verified	The effective CPU processing rates used for sizing purposes in PGS-1300 shall not be greater than 25% of peak-related CPU capacity.	A: TRMM		S-DPS-60240	9208	A	performance	approved	demo	The SPRHW CI shall support a total processing requirement as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
												S-DPS-60235	NEW	A	performance	approved	analysis	The SPRHW CI shall be sized by assuming that the effective CPU throughput of any and all processor does not exceed 25% of the processor clock speed multiplied by the maximum number of operations the processor can perform per clock cycle.

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PGS-1310#A	6196	mission essential	SDPS	performance	analysis	un-verified	analysis	un-verified	The processing capacity necessary to process all EOS science data for which each PGS is responsible shall be based on the data volumes and instrument processing load requirements (MFLOPS) assigned to each DAAC.	~~A: TRMM~~ Instrument Assignment for Release A is for LaRC : 1.2X CERES on TRMM and .3X (MISR, MOPPIT and CERES on AM-1); GSFC: .3X MODIS; and EDC: .3X MODIS and ASTER)		S-DPS-60240	9208	A	performance	approved	demo	The SPRHW CI shall support a total processing requirement as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.